

IN THE UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF GEORGIA  
ALBANY DIVISION

MICHAEL NEWCOMB and KATHY	:	NO.
NEWCOMB,	:	1:15-CV-00080-
	:	LJA
Plaintiffs	:	
vs.	:	
	:	
SPRING CREEK COOLER, INC.;	:	
SPRING CREEK PRODUCE, LLC; SF	:	
FARMS, INC.; SF EXPORTS, INC.;	:	
T&L FARMS, INC.; TERRIL SCOTT	:	
PROPERTIES, LLC; TERRIL SCOTT	:	
FARMS, LLC; WALDINE B. SCOTT	:	
FARMS, LLC; EDDIE T. SCOTT	:	
FARMS, LLC; TS EQUIPMENT	:	
LEASING, LLC; L&W FARMS, LP;	:	
TERRIL SCOTT; and JOHN DOE,	:	
Name Unknown, Address Unknown	:	
Defendants	:	

VIDEOTAPE DEPOSITION OF WILLIAM J. AZEREDO, M.D.

Taken in the offices of William Azeredo, M.D., 100 North Academy Avenue, Danville, Pennsylvania, on Thursday, February 16, 2017, commencing at 8:16 a.m., before Justine Starrick, Registered Professional Reporter, Tim Art, Videographer.

\* \* \*

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1 THE VIDEOGRAPHER: The date today is  
2 February 16, 2017. The time is 8:16 a.m. This is  
3 the videotape deposition of William J. Azeredo,  
4 M.D., taken in the matter of Michael Newcomb and  
5 Kathy Newcomb versus Spring Creek Cooler, Inc., et  
6 al, filed in the United States District Court Middle  
7 District of Georgia, Albany division, case number  
8 1:15-CV-00080-LJA.

9 This deposition is being held at 100  
10 North Academy Avenue in Danville, Pennsylvania. My  
11 name is Tim Art and I am the videographer. I am  
12 with Gallagher Reporting and Video. The court  
13 reporter is Justine Starrick. At this time will  
14 counsel please state their appearances for the  
15 record, after which the court reporter may swear in  
16 the deponent.

17 MR. HELMS: Jeff Helms, and I'm here  
18 for Mr. Michael Newcomb and Ms. Kathy Newcomb.

19 MR. PICKETT: I'm Mark Pickett, and I  
20 represent Spring Creek Cooler as well as the other  
21 defendants in this case.

22 \* \* \* \*

23 WILLIAM J. AZEREDO, M.D., having been  
24 duly sworn, was examined and testified as follows:

25 \* \* \* \*

DIRECT EXAMINATION

\* \* \* \*

BY MR. HELMS:

Q. Doctor, I'm Jeff Helms. We met earlier and talked before we got going with this deposition. We're going to ask you some questions. And this is a videotape deposition taken here in Danville, correct?

A. Uh-huh.

Q. I'm going to ask you to tell the jury about your experience with Mr. Newcomb as his physician, okay.

A. Uh-huh.

Q. Now, let's get started by you telling the jury your full name please, sir.

A. William James Azeredo.

Q. And, Doctor, you are a medical doctor?

A. Correct.

Q. You have a specialty in the medical field?

A. Uh-huh.

Q. What specialty is that?

A. Otolaryngology.

Q. That's a big word. Tell us what that means.

A. Ear, nose, and throat.

1 Q. Are you also a surgeon as an  
2 otolaryngology?

3 A. It is a surgical subspecialty, so, yes.

4 Q. Please tell the jury briefly your  
5 educational background in order to become the doctor  
6 that you are now?

7 A. Sure. It's four years of medical school,  
8 and five years of residency. That's it.

9 Q. Board certified?

10 A. Absolutely.

11 Q. We've talked with other doctors the last  
12 couple of days about board certification, but if you  
13 could also explain to the jury what it means to be  
14 board certified as an otolaryngologist?

15 A. Sure. Once you complete your residency in  
16 your first year out you take your boards, which is a  
17 two part exam, one day written, one day oral boards,  
18 and a percentage of people pass that exam. And if  
19 you pass that exam you go from being board eligible,  
20 which means you've graduated from your residency, to  
21 board certified. So it means you've not only gone  
22 through the education, but demonstrated you have  
23 sufficient knowledge.

24 Q. And this is a national test that's given to  
25 everybody?

1 A. Absolutely. It's a standardized national  
2 test.

3 Q. It's a certification that you have a  
4 certain competency of otolaryngology that otherwise  
5 you wouldn't have, is that right?

6 A. Yes, it's like having a national bar.

7 Q. I understand. Thank you. Where do you  
8 practice right now?

9 A. Here in Geisinger.

10 Q. And Geisinger is a -- appears to be a  
11 fairly large medical complex?

12 A. It's a large medical system that serves  
13 roughly one-third of the State of Pennsylvania.

14 Q. During the course of your practice here  
15 have you had the opportunity to examine and treat  
16 and operate upon a gentleman by the name of Michael  
17 Newcomb?

18 A. Yes.

19 Q. How did you first meet him and how did he  
20 come into your care?

21 A. He came in with an ear complaint of altered  
22 hearing on his left ear, and in the course of his  
23 evaluation found that while the complaints were a  
24 bit unusual, they in no small part seem to  
25 ultimately be a pulsatile sound in the ear,

1 difficulty hearing with a relatively normal looking  
2 exam. And concern was raised for fluid behind the  
3 drum given his past history.

4 Q. And the history is?

5 A. With three years in between plus since I've  
6 seen him, he had come in after the fact after a  
7 trauma. He still had healing lacerations on the  
8 side of his head. And this postdated that trauma.

9 Q. You said he had lacerations on his head.  
10 Do you mean he had -- did you see evidence of a scar  
11 on top of his head?

12 A. Well, yeah, superior to his ear, they were  
13 healing lacerations.

14 Q. When you say superior to his ear?

15 A. Above his ear in this area. (Indicating.)

16 Q. Left side?

17 A. Correct.

18 Q. There was a CT scan that talked about a  
19 complete --

20 A. Opacification.

21 Q. Opacification?

22 A. Uh-huh.

23 Q. Was that relevant to your diagnosis of his  
24 problem at all?

25 A. In general opacification means -- well, to



1 back up, it means opacification of air cells that  
2 exist in the bone behind the ear called the mastoid.  
3 And those air cells connect with a space behind the  
4 eardrum. And he had fluid on that CT scan both  
5 behind -- or soft tissue density material,  
6 opacification, behind the eardrum and in these air  
7 cells.

8 And on a CT scan that means it's not  
9 air as it's supposed to be, it's something else.  
10 And the options are inflammation, soft tissue,  
11 fluid, or some combination thereof.

12 Q. So after you saw him he was complaining  
13 about I think a fullness in his left ear, is that  
14 right, what is that --

15 A. Among his complaints, plugged feeling, oral  
16 fullness is a more technical term for it, and  
17 altered sense of hearing.

18 Q. Ultimately what did you find out what was  
19 wrong with the gentleman?

20 A. Well, after we did a myringotomy.

21 Q. Tell us what a myringotomy --

22 A. Which is making a small incision in the  
23 eardrum after putting topical numbing paint on the  
24 eardrum. He was found to have fluid on the eardrum.  
25 As it was somewhat pulsatile and clear this was

1 concerning for CSF. Because any typical fluid  
2 behind the eardrum is not clear and not pulsatile.  
3 So we sent it off for a protein that is functionally  
4 only found in CSF, which is fluid that bathes the  
5 brain and spinal cord.

6 Q. And during the course of the deposition I'm  
7 going to interrupt you every once in a while when  
8 you use certain words I'll need a definition and the  
9 jury will too. Okay?

10 A. I'll try to explain any technical terms I  
11 use, but otherwise feel free.

12 Q. Pulsatile?

13 A. Means a pulsing sound. So I used it twice  
14 already, pulsatile tinnitus is a pulsing sound in  
15 the ear. To have fluid pulse is what you would  
16 imagine if you had something underneath and you had  
17 a hole and had fluid come up and you had something  
18 that would sort of be a pump underneath, you would  
19 see it well up a little bit and go back down.

20 Q. That's something you could observe?

21 A. With a microscope, yeah. When we make  
22 these incisions it's all with an operating  
23 microscope in clinic so we could see it pretty  
24 easily.

25 Q. Even to get the fluid off his ear it's with

1 a microscope and you have to stick it in his ear, is  
2 that right?

3 A. I'm sorry, stick what in there?

4 Q. The needle to get the fluid out?

5 A. Well, the way we do it is we make a small  
6 incision with a -- it's called a myringotomy knife.  
7 It's just a small blade, and a patch that we've  
8 numbed up on the eardrum. And through that we could  
9 see fluid come up and then we suction it out and  
10 collect it to send it off if we're concerned about  
11 it being CSF.

12 Q. And CFS is?

13 A. CSF, is, again, fluid that bathes the brain  
14 and spinal cord. It's an acronym for cerebral  
15 spinal fluid.

16 Q. And that's what it was behind his ear, his  
17 eardrum?

18 A. Correct. Because the lab was positive. So  
19 that is basically the diagnosis.

20 Q. What did that indicate to you at that point  
21 then, what his problem was?

22 A. He had a CSF leak, and that's why he had  
23 fluid behind his eardrum and in his mastoid air  
24 cells, again, this bone is the mastoid. And  
25 unfortunately at that point it's not a medical

1 issue, it's a surgical issue. (Indicating.)

2 Q. You scheduled surgery for him?

3 A. Correct.

4 Q. And you also asked a neurosurgeon to assist  
5 in the surgery, is that right?

6 A. Uh-huh.

7 Q. And what doctor was that?

8 A. Dr. Toms.

9 Q. Is he a colleague of yours here at  
10 Geisinger?

11 A. He's now not here, he's moved on, but he  
12 was a colleague of mine, yes.

13 Q. Had he assisted you before in surgeries?

14 A. Oh, yes, and subsequently. We did many of  
15 these together. By that I mean, all the ones that  
16 we came across, more than we would like to do  
17 because we would like to do none and people  
18 obviously not have a CSF leak.

19 Q. Technically what was the nature of the  
20 surgery that you recommended for Mr. Newcomb?

21 A. Middle fossa craniotomy with repair of CSF  
22 leak with tragal cartilage graft and myofacial flap.

23 Q. All right. And when you and Dr. Toms were  
24 performing this surgery, did you stay in the OR room  
25 with him and he stayed in the OR room with you and

1     you all worked together, or did you come in and out,  
2     or how did that work?

3     A.           I was there for the entire time. He was  
4     there for placement of the lumbar drain and he came  
5     in to see if there were any issues, there weren't.  
6     And then at one point we found an encephalocele,  
7     which is basically a small nonviable portion of the  
8     brain herniating into the ear space. And I had him  
9     remove that basically bipolar, which is cautery  
10    between two tips so it's all focal and not spread,  
11    the electric current from the cautery. And then he  
12    attempted repair of the dura. But the dura is the  
13    tough stuff, the tougher layer that covers the  
14    brain. But it was thinned out to the point where  
15    that wasn't productive so then proceeded with the  
16    repair of the defect in the skull base.

17    Q.           How many times before Mr. Newcomb do you  
18    think you worked with Dr. Toms doing something like  
19    that?

20    A.           I honestly don't remember, but more than  
21    once.

22    Q.           And you worked with him subsequently after  
23    Mr. Newcomb on similar surgeries?

24    A.           Yes. At least a dozen to 15 times.

25    Q.           So you all were in the operating room

1 working as a team really?

2 A. Uh-huh.

3 Q. I think we're to the point right now that  
4 earlier I had a sent to you a medical illustration,  
5 is that right?

6 A. Uh-huh.

7 Q. You've had a chance to review that?

8 A. Yes.

9 Q. Is it a reasonable, accurate representation  
10 of the human anatomy for Mr. Newcomb?

11 A. It's reasonable, yes.

12 Q. And does it give a reasonable depiction of  
13 the surgical process that you all undertook?

14 A. It's illustrative, yes.

15 Q. And would that illustration help you  
16 explain your testimony to the jury?

17 A. Sure.

18 Q. Doctor, if we could, and I'm going to pick  
19 this up and bring it over to you, this is going to  
20 be marked as Plaintiff Exhibit Number 1 to the  
21 deposition. I want you to use this illustration if  
22 you could to kind of walk the jury through first of  
23 all the anatomy and what we're talking about, and  
24 then the process of the surgery.

25 A. Do you want me to hold it or are you going

1 to hold it?

2 Q. I'll hold it for you.

3 A. This is what's called a coronal view. By  
4 that it's a cut this way, so here is the brain.  
5 This is the spinal cord here. The left ear would be  
6 here. And you could see that the balance system is  
7 here. That's the organ of hearing called the  
8 cochlea. Here is the eardrum. And the space behind  
9 the eardrum is here that we were talking about.

10 (Indicating.)

11 The mastoid area I was talking about,  
12 which is posterior to the ear canal, would be deep  
13 to the plane of this board. But remember, those are  
14 filled with air cells that are contiguous with the  
15 space behind the eardrum. This is the lateral skull  
16 here. And this area here is what I was referring to  
17 as the lateral skull base or just skull base for the  
18 purposes of this case. And that is the bony  
19 separation between the brain space and the ear  
20 space. And basically pertinent to this case this  
21 represents an encephalocele, which is a small  
22 herniation of brain through a defect in the skull  
23 base. (Indicating.)

24 Q. When you say a defect in the skull base, is  
25 that what walking around folks would say a fracture

1 in the skull base?

2 A. It could be. But some people do have  
3 natural defects in the skull base. So I view it as  
4 just for all purposes regardless of whether it was  
5 acquired or congenital or acquired from trauma or  
6 not just a defect for generic term.

7 Q. But it's part of the skull though, that  
8 bony part right there?

9 A. Yes, it's supposed to be a complete bone  
10 plate, that's considered the normal state.

11 Q. All right, sir. And when you say the  
12 encephalocele, it was a herniation the brain tissue  
13 was just --

14 A. It doesn't have to be brain per se, but it  
15 could also be the lining covering it. It's  
16 basically contents from this space, so that includes  
17 dura, meninges, doesn't have to be actual brain.  
18 That would be a meningeal myelocele. But this is an  
19 encephalocele, this is contents from this space  
20 herniating through there. With that that would be  
21 the suspected obvious site of the leak of fluid, the  
22 CSF that we talked about earlier.

23 Q. And this is a serious condition for a  
24 patient to have, isn't it?

25 A. We don't undertake this surgery, you know,



1     lightly. We do this because we have to. We do this  
2     because anybody that has a CSF leak is at risk of  
3     developing meningitis, which can be extremely  
4     significant.

5     Q.           And that was my question. How would the  
6     meningitis come around, what would be the process,  
7     if he got meningitis if this had not been repaired,  
8     say, for instance, how does that work, what's the  
9     fear?

10    A.           Well, anybody with an ear infection or any  
11    sort of -- you have an unnatural communication  
12    between the CSF space which is essentially immune  
13    sacred area, now in communication with the outside  
14    world because the space behind the eardrum  
15    ultimately through the eustachian tube, which is  
16    somewhat drawn in here, connects to the space behind  
17    the nose. And while this is a clean space, it  
18    doesn't have to be clean and it's the same concern  
19    whether it were a leak through the nose in the  
20    anterior skull base or the lateral skull base.

21    You're not supposed to have that communication. So  
22    it's basically something that needs to be repaired.

23    Q.           Simplified, does it mean that bacteria  
24    could come up through that leak and get up inside  
25    the brain?

1 MR. PICKETT: Object to leading.

2 THE WITNESS: I'm sorry?

3 MR. PICKETT: I object to leading.

4 A. Essentially meningitis is an infection of  
5 the meninges, the lining covering the brain, and  
6 it's the concern, meningitis. It's basically as I  
7 explained an unnatural pathway by which an infection  
8 could track to the brain space.

9 MR. PICKETT: Could we go off the  
10 record for a second.

11 THE VIDEOGRAPHER: Time is 8:33, we  
12 are going off the video record.

13 (Discussion held off the record.)

14 THE VIDEOGRAPHER: The time is 8:34,  
15 we are back on the video record.

16 BY MR. HELMS:

17 Q. Doctor, in terms that maybe we could  
18 understand, explain to us how meningitis would be a  
19 danger in this case and what would be the process of  
20 how it would occur, how it would enter and get to  
21 the brain?

22 A. Well, one, I can't guarantee that if you  
23 have a CSF leak you're going to get meningitis. The  
24 problem is you're at risk for it, and once you've  
25 identified the risk it's not -- as long as you're

1 healthy enough to undergo the surgery, it's not  
2 considered an option to leave it alone.

3 Q. All right.

4 A. Unless a patient so choose understanding  
5 the risks of meningitis or even worse brain abscess  
6 and what the chances are of being who you were  
7 before and after such an episode. But the fear  
8 would be bacterial meningitis based on the location.

9 Q. And how would the bacteria enter the ear  
10 and get into the brain?

11 A. And, again, if you had an ear infection,  
12 the space behind your eardrum, that type of ear  
13 infection, I'm not talking about something shallow  
14 to the eardrum, but in the middle ear, which is the  
15 volume between the eardrum and the inner ear, which  
16 is the organ of hearing and balance, it's not  
17 uncommon for people to have an infection. And if  
18 you have an unnatural communication between that  
19 space, and with that I include the mastoid, then you  
20 have a much higher risk than the average patient  
21 would have of developing an infection tracking into  
22 this space. And the first and most significant risk  
23 is that of meningitis.

24 Q. All right, sir. Thank you. Okay. Moving  
25 on then I think you have identified the condition

1       that Mr. Newcomb had. If you could just maybe --  
2       well, over here it's got a drain, and that was done  
3       -- recommended by Dr. Toms. Can you explain to the  
4       injury why you do that in a surgery like this?

5       A.           Sure. And to clarify I don't do this,  
6       neurosurgery does this. It's in part -- for this  
7       particular case it's to take some of the fluid out  
8       of that space to basically create more room because  
9       the fluid in question is between the dura here and  
10      the brain and you're trying -- if you're making a  
11      window into this space you want to have an easier  
12      time visualizing this area, and there would be less  
13      retraction of the brain in that circumstance. You  
14      also use certain medications to also reduce that  
15      pressure inside that space. (Indicating.)

16                   So it's partly for visualization  
17      during the case and keeping patients safe. The  
18      second part has to do with post-op care and letting  
19      the grafts and flap we put in there basically not  
20      have the added pressure and you release some of the  
21      CSF over so many hours to reduce that pressure. As  
22      you questioned earlier, we produce plenty of CSF, so  
23      it's not a question of running out of CSF. You just  
24      reduce the volume, and it's in a monitored setting.

25                   And in cases outside of this in

1       general we use a lumbar drain because most people  
2       who have these types of leaks they're spontaneous  
3       not acquired from some form of trauma. And in those  
4       patients it gets to trying to determine an  
5       underlying diagnosis for those patients with  
6       spontaneous leaks.

7       Q.           Just one question, the drain, how is it --  
8       what is used to put the drain in?

9       A.           Well, this is -- these are a series of  
10      questions that are probably best asked of the  
11      neurosurgeon involved rather than me. But in  
12      general there's a trochar, you basically are trying  
13      to get between the vertebra.

14     Q.           A trochar?

15     A.           Basically a long needle with an open bore  
16      once you have it in there. So it's got a stylet to  
17      keep it so you don't bring any tissue into it, and  
18      you take the stylet out. These aren't technical  
19      terms I'm sure, because I'm not a neurosurgeon.

20     Q.           But you understand the process?

21     A.           Yes. And they basically identify that  
22      they're in the fluid space between the spinal or  
23      inferior to the spinal cord and the dura covering  
24      that area. And once they're in there they thread a  
25      catheter through that trochar and thread it into

1       that space. Obviously this is done sterilely and  
2       they basically suture it so it can't be pulled out.  
3       And then you have this tubing essentially in the  
4       same space that this is. (Indicating.)

5                       So CSF is cerebral spinal fluid. So  
6       whether you're accessing here or here, you're  
7       reducing the pressure in this area by draining it  
8       out there. (Indicating.)

9       Q.            So it's a catheter stuck into the spine  
10      inside the spinal column to drain the fluid out?

11                   MR. PICKETT: Objection, leading.

12      Q.            Is that a --

13      A.            I wouldn't use those terms. It's basically  
14      into -- the spinal cord runs through the center of  
15      the spinal column and it's between two facets here  
16      where if someone is bent you could access it better.  
17      And you're trying to -- think of it -- the best way  
18      to think of it, it's the same approach as would be  
19      done for an epidural for a pregnant female if she  
20      was going to have an epidural during labor, except  
21      rather than being superficial to the dura, epidural,  
22      it's through dura, so you're into the CSF space.

23      Q.            All right. If you'll move forward, and I  
24      think down at the bottom left begins the process of  
25      how the surgery gets going.

1 A. Okay.

2 Q. If you could walk the jury through the  
3 incision that you make.

4 A. Sure.

5 Q. There's a notation about the cartilage, why  
6 is that important in this case? We'll get to that.

7 A. Okay. I'll cover that.

8 Q. Yeah.

9 A. Basically the incision, since we tend to  
10 care, we try and hide the scar as much as possible,  
11 we do a standard ear incision, which is just  
12 posterior to the connection between the ear and the  
13 side of the skull, so it's actually closer to the  
14 ear so you can't see it. And right above the helix  
15 here, or the root of the ear, it kind of comes  
16 straight up about a centimeter or two centimeters.  
17 So because we need to access here to get to there.  
18 So basically this hides the incision well, it would  
19 all be in the hair. It's all just cosmetic. Other  
20 people do these flaps differently. This isn't --  
21 there's no one way to do this. (Indicating.)

22 Q. Assuming you've got hair to cover it?

23 A. Even if you don't, you're still a lot  
24 happier with a scar that if I looked at you straight  
25 on you wouldn't see, versus a big C shape flap here.

1 (Indicating.)

2 Q. I got you.

3 A. So basically secondarily this little  
4 cartilage nub here is called the tragus. And that  
5 is an excellent source of graft material to fill  
6 defects, because cartilage tends to be stable and  
7 not go away as readily as just a bone graft would.  
8 And it's malleable and you could cut it to fit the  
9 size of a defect a little bit, and it has a natural  
10 connective tissue layer covering it, the  
11 perichondrium. So you also have attached to it a  
12 connective tissue, little flap, to help hold it in  
13 place, secure it, and also help cover further area.

14 So through a separate small incision  
15 on the axis of the tragus we basically tunnel down  
16 to the cartilage and the perichondrium and snip that  
17 piece out and close it. It looks the same, it's  
18 just we warn the patient, it'll be a little bit  
19 floppier than it used to be, but no one will look at  
20 that and notice.

21 Q. Okay.

22 A. But obviously if you have a CSF leak you're  
23 more concerned about repairing the leak.

24 Q. Did you use that, that plug that you pull  
25 out of there for placing it inside his --



1 A. Well, it's a graft, it has no blood supply.  
2 And that's one of the layers we use to basically  
3 fill the defect in the skull base.

4 Q. All right.

5 A. But this implies we did this at first. And  
6 sometimes we do, because we pretty much always use  
7 it, but we actually in his case did it later so I  
8 could have a sense of the size of the defect so I  
9 knew how much cartilage I would need.

10 Q. You mean once with you got inside and  
11 looked at it?

12 A. Once we knew -- yeah, because it's all in  
13 the prepped area, it's not like a reboot. It's,  
14 okay, now we know what side we need, let's harvest  
15 the graft.

16 Q. That makes sense. Okay. Continue on, and  
17 using this illustration if you could.

18 A. So once we make this incision we basically  
19 are down to the connective tissue that covers this  
20 big muscle here called the temporalis muscle. And  
21 we basically harvest a sort of tongue shaped flap of  
22 that connective tissue and a thin veneer of the  
23 muscle attached to it so it has some substance.  
24 It's basically a flap here and pedicled on the blood  
25 supply here. And we basically roll it back here and

1 cover it with saline covered gauze to protect it  
2 during the case. And then we come down through that  
3 muscle in the connective tissue here to visualize  
4 the skull as you see here. (Indicting.)

5 And then we tend to make -- there  
6 isn't one particular way to do this, but basically  
7 you make a window in the skull, we make a small  
8 window, probably because -- most likely because  
9 we're ear surgeons and we don't like big window and  
10 we're used to small spaces, and that lets us see the  
11 dural covering, which is this white here.  
12 (Indicating.)

13 Q. Let me stop you.

14 MR. HELMS: Are you able to get this  
15 okay? I just wanted to make sure he's picking it up  
16 on the video.

17 A. And understand, our patient isn't sitting  
18 up. So they're like this. So our view is all under  
19 a microscope by the way. So we're looking at this  
20 interface between the dura and the skull base here.  
21 So we basically still have a little bit to tunnel  
22 down here. And we gently lift the dura up. And if  
23 you see some small defects you could identify them  
24 at this point. And you basically keep coming more  
25 medially toward the middle of the skull and trying

1 to identify the entire lateral -- from the ear  
2 perspective tegmen. So cut that area of bone  
3 separating ear from brain, both covering the space  
4 behind the eardrum, the middle ear, and posterior to  
5 it, that covering, the mastoid, that bony separation  
6 between ear and brain. Okay.

7 Q. Okay.

8 A. So as we do that then in his particular  
9 case we encountered this encephalocele. We didn't  
10 know he necessarily had one up front, it's just he  
11 had a defect, you're always prepared for that. Once  
12 that was encountered, as I mentioned earlier,  
13 Dr. Toms came in and basically bipolarized that stock,  
14 because this is nonviable tissue at that juncture.

15 Q. When you say nonviable, it had had blood  
16 supply and it's dead?

17 A. It's nonfunctional in terms of any neural  
18 activity, it's basically a stock. If it had any  
19 actual brain in it per se, because again  
20 encephalocele doesn't necessarily mean there's brain  
21 in there. But the bottom line is if you pull it out  
22 it doesn't pull out well. And, two, there's no  
23 great reason to, you just basically separate it off  
24 safely so you have that defect there.

25 Q. In hernia cases I've heard of them talk

1 about, doctors talk about muscle tissue or organs  
2 being incarcerated, is that the same thing?

3 A. What kind of hernia, you mean like an  
4 inguinal hernia?

5 Q. Yes. Is that similar to that or is that --  
6 is that something that just --

7 A. Incarcerated implies it's pinched off.

8 Q. Yeah.

9 A. I suppose you could say it that way, but  
10 it's not helpful in this case. It's if it comes  
11 through it doesn't have much of a blood supply and  
12 it's non-functional at that point any way. This  
13 wasn't a large encephalocele, you just want to make  
14 sure you separated it off and don't just pull up.

15 Q. I got you. Okay.

16 A. So at that point for Mr. Newcomb's case  
17 Dr. Toms attempted to repair the dura in that site,  
18 but it was to thread bare, as it typically is in  
19 these cases, it wasn't worth trying to repair,  
20 there's nothing to repair.

21 Q. And when you say dura, explain to us again.

22 A. Again, it's the tougher layer, this white  
23 layer that cover the brain and the meninges.

24 Q. Meninges?

25 A. The delicate lining that covers the brain.

1 We used that the term before relative to the term  
2 meningitis, which is an infection of that lining.

3 Q. Okay.

4 A. So basically at that point then, you know,  
5 you want to make sure you've identified every spot  
6 where fluid could leak through. And once you've  
7 done that as thoroughly as you can and figure any  
8 further risk outweighs the benefit, then you  
9 undertake the patching of the holes to put it  
10 simply. And smaller ones you can use bone wax,  
11 which is similar to paraffin, totally inert, just to  
12 fill it. The one where the encephalocele was though  
13 was larger and we used that cartilage we harvested  
14 from here for that. (Indicating.)

15 And then after that that flap that I  
16 talked about before, which would have been over here  
17 now, we basically turned over to cover this area.  
18 And the idea in general is to have more than one  
19 layer plugging these things. So now with the  
20 cartilage, the bone wax, and then the connective  
21 tissue covering that cartilage, consider that one  
22 layer, and then you have this other layer of  
23 connective tissue with a muscle, that has muscle on  
24 it, covering all of it. And then we use tissue glue  
25 to hold it in place. And then we place the bone

1 back on and close.

2 Q. You just cut a little plate of the skull  
3 out?

4 A. Uh-huh.

5 Q. Set it aside?

6 A. Sterilely of course.

7 Q. And how is that -- how is it placed back in  
8 there?

9 A. We use mini plates basically, titanium  
10 plates to hold it to the adjacent skull.

11 Q. So you put another -- is that a titanium  
12 plate you replace that with?

13 A. We try and use the same bone, but it's such  
14 a small hole, honestly, you could use a titanium  
15 plate and not use the bone.

16 Q. Did you use a titanium plate in this case  
17 versus a bone?

18 A. I can't remember specifically because I  
19 haven't read my OR report for over three years.

20 Q. Okay.

21 A. But if I didn't use the residual bone it  
22 was because it was so small and it wasn't worth it,  
23 because screwing the plate into the bone -- so you  
24 have to tell me whether I did or didn't. There's  
25 sometimes where the bone is so thin and it's -- as

1     you try and put a screw in it it fractures anyway  
2     that you put a larger titanium plate covering it.  
3     And it's a small enough defect that honestly you  
4     probably wouldn't have to use anything, but would  
5     rather have something on there.

6     Q.           I've got you our op note here.  Would you  
7     be able to take a look at it real quick?

8     A.           Sure.

9     Q.           Would that be Dr. Toms' op note or your op  
10    note?

11    A.           I haven't seen it yet.

12    Q.           No, that --

13    A.           Oh, I'm sorry, that would be mine.  I  
14    thought that was a trick question.

15    Q.           No trick questions here.

16    A.           Can I let go of this?

17    Q.           Yeah, I've got it.

18    A.           All right.

19    Q.           We're saying op note, this is an operative  
20    note that you dictate based on your surgery, is that  
21    right?

22    A.           Here we go.  Okay.  Given the size -- the  
23    decision was made to use a burr hole cover over the  
24    craniotomy.  Okay.  So we used a burr hole cover.

25    Q.           In other words you used a plate?

1 A. A titanium plate. And, again, these are  
2 really small defects and many people wouldn't cover  
3 it. That's a minor thing. Many people would have a  
4 defect larger than this have nothing covering it.  
5 It's just -- the total size, you're talking roughly  
6 a centimeter and a half, you know, and at the  
7 greatest height two centimeters by two and a half to  
8 three total, you know. It's a small defect.

9 Q. Just to give the jury an idea, you're doing  
10 all of this with microscopic tools looking into a  
11 viewer?

12 A. Absolutely.

13 Q. And then you're -- you use those tools by  
14 -- how do you -- like a little stick or thing, how  
15 is that done, explain --

16 A. I don't understand.

17 Q. When you're looking down in there you're  
18 using tiny little tools that you're looking at  
19 through --

20 A. When you're working on the skull base it's  
21 all under a microscope, and we use specific  
22 instruments for middle ear surgery and neurosurgery.  
23 So a combination, depending on what works the best,  
24 but a lot along here are neurosurgical instruments,  
25 little elevators, an elevator is just basically --



1       how would I explain an elevator -- basically you  
2       elevate tissue off some other surface.

3       Q.           Pull it off the surface?

4       A.           Like a tiny little spatula. So not sharp  
5       instruments. And small little forceps that you  
6       could see drawn in here. (Indicating.)

7       Q.           How do you manipulate those tools?

8       A.           By hand.

9       Q.           Okay.

10      A.           This isn't robotic surgery if that's what  
11      you're getting at.

12      Q.           I guess that's what I was getting at, like  
13      a laparoscopic surgery like you stick something in  
14      there and manipulate.

15      A.           This isn't looking on a screen with scopes.  
16      This is a microscope, not a -- you're thinking of  
17      more like a telescope like with laparoscopic belly  
18      procedure.

19      Q.           So you've got to have a pretty steady hand  
20      I take it?

21      A.           Yes.

22      Q.           I would hope so.

23      A.           Well, I wasn't going to be funny about it,  
24      but, yes, you would certainly hope so. But in the  
25      is scheme of thing if you're an ear surgeon you by

1 definition have to have a steady hand, because most  
2 of what I do is much finer and smaller than this  
3 repair.

4 Q. Okay. Move forward for us if you could. I  
5 think you had talked about removal of that bone  
6 plate?

7 A. So this is a demonstration of placing a  
8 cartilage graft in the defect where the  
9 encephalocele was. There would be a little piece of  
10 perichondrium attached that would lay over part of  
11 this. And depending on what looked thinner and  
12 where I had used bone wax, I would orient it so the  
13 connective tissue was covering that as well. And  
14 this is a demonstration of that myofacial flap,  
15 though it doesn't look quite that big, but it would  
16 cover all of that area.

17 And then once that's in place you  
18 basically use a fibrin glue to glue everything in  
19 place and then put the titanium plate here so the  
20 connective tissue and muscle close, so the layer  
21 under the skin closes, so the skin closes, and put a  
22 little dressing on there.

23 Q. All right. And that ends the surgery part,  
24 is that right?

25 A. Correct.

1 Q. Thank you so much. Mr. Newcomb followed up  
2 with you on several occasions afterwards in your  
3 office, is that right?

4 A. Uh-huh.

5 Q. How did he progress after the surgery?

6 A. He's done well. I still see him, just  
7 annually, just to make sure he's doing okay. I saw  
8 him last fall and he's done very well. He's not had  
9 any problems. Initially he still had some fluid  
10 behind his eardrum. We always are concerned about a  
11 persistent leak, that resolved. He had imaging  
12 which showed no fluid in there. He's not had any  
13 further problems. Anything that was bugging him  
14 pre-op is gone in terms of his ear.

15 Q. And that's just what you limited your care  
16 to, was the repair of the problem inside his skull  
17 right there for the ear, is that right?

18 MR. PICKETT: Object to leading.

19 THE WITNESS: I'm sorry?

20 MR. PICKETT: Object to the leading.

21 Q. You could go ahead and answer.

22 A. Well, I'm an ear surgeon, so I'm interested  
23 in ear complaints. And this is an interface between  
24 a neurosurgical issue and otologic issue and that's  
25 why the particular team and the approach.

1 Q. To your knowledge he was seeing other  
2 medical doctors for other problems here at  
3 Geisinger?

4 A. Yes, but I don't know the details of those  
5 because, you know, I'm farmed out to a small  
6 component of his concerns.

7 Q. Just a couple of questions about the follow  
8 up. I think at one point he was complaining about  
9 pain on the right side of his head as opposed to the  
10 left side of his head. Do you have any memory of  
11 that from the clinical notes, does that stand out to  
12 you?

13 A. Not particularly. No, that must have been  
14 a long time ago. But it wouldn't have anything to  
15 do with the surgery unless he had musculoskeletal --  
16 because you're positioned in a certain way, if it  
17 was immediately after surgery -- you tell me, was  
18 it?

19 Q. The first two clinic visits after surgery.

20 A. It could be that. But otherwise given --  
21 it could be anything else. But there would be no  
22 direct reason to assume it had anything to do with  
23 the surgery or CSF leak which predated that surgery.

24 Q. When you said -- to make sure we  
25 understand, when his head is tilted you said it

1       could have been due to a musculoskeletal, just  
2       strain in a neck?

3       A.           If I have you in a position like this for  
4       four hours you're not going to -- you know, if you  
5       have any issues with your neck you're going to be  
6       sore afterward.

7       Q.           If you've got pre-existed arthritis in your  
8       neck and you're in that position for four hours?

9                   MR. PICKETT: Objection. Objection,  
10       leading.

11       A.           It's not way over, it's like this. And it  
12       could be, but it could be he would have had that  
13       anyway. I'm just saying it's not, depending on when  
14       he complained of the pain, if you said it was after  
15       surgery, sure, it could be from positioning. But  
16       you can't have him like this, you know, you have to  
17       be able to access the area. But, you know,  
18       independently of that it was a short lived issue for  
19       him and it's not atypical, whether people have  
20       arthritis or not, that from positioning they're  
21       going to be sore for a while after. (Indicating.)

22       Q.           This was just from the first two clinic  
23       visits after the surgery then it didn't appear to be  
24       any more trouble.

25       A.           All I know is he's been smiling for several

1 years and he was not smiling when I met him.

2 Q. The surgery was a success I take it?

3 A. Uh-huh.

4 Q. Yes. Okay. Will he follow up with you in  
5 the future?

6 A. Yeah, I said he's following up next year.  
7 It was in this past fall as well, yeah, just to make  
8 sure he's doing okay. Most people I follow up for  
9 some period of time afterward to make sure there  
10 aren't any further issues.

11 Q. At one point I think it may be the third  
12 clinic visit you got more fluid off the eardrum.  
13 What was the concern there?

14 A. Oh, I mentioned that earlier, we're always  
15 concerned about that, that it isn't completely  
16 repaired. But you can -- like I said, it takes a  
17 while for it to heal in. And in talking with  
18 neurosurgery they felt it was probably just healing  
19 in, and he's had no further fluid since that time.  
20 So it was probably the process of scarring, of those  
21 flaps scarring down. You don't heal instantly.

22 Q. It takes a while, doesn't it?

23 A. Yeah, basically you're asking these flaps  
24 and grafts to scar down onto the defect. And it  
25 assumes there's no residual fluid behind in that

1 space, which there could be.

2 Q. You talk about some of these problems can  
3 happen to people spontaneously without any trauma,  
4 is that right?

5 A. Uh-huh.

6 Q. In this particular case, based on your  
7 knowledge about the history he gave to you and what  
8 you observed about where he hit his head there, in  
9 your medical opinion within a reasonable degree of  
10 medical probability, is it more likely than not that  
11 this defect that he had as you refer to it, was it  
12 caused by trauma, or did it just happen naturally?

13 A. Honestly that's a tricky question because I  
14 don't have a way of knowing. But if it was there  
15 before and he had an encephalocele before, what he  
16 didn't have before based on his complaints afterward  
17 was a CSF leak. So if he had had an encephalocele  
18 before you wouldn't necessarily repair it unless it  
19 was causing a problem. So independent of whether  
20 there was a fracture there or not, I have all the  
21 reason based on his symptoms to think that he had a  
22 CSF leak subsequent to the trauma, whether or not it  
23 was directly caused by a fracture or not. Does that  
24 make sense.

25 Q. Well, let me think about that just a

1 second.

2 A. In other words, if you had this soft  
3 tissue -- it's a presumption because I have no way  
4 of knowing, I'm trying to be as objective as  
5 possible. Let's say you had a situation where a  
6 patient had some soft tissue herniating through a  
7 defect, and then through some force of trauma you  
8 shear that and that develops a leak, it's still a  
9 leak after a trauma, whether or not it was a  
10 fracture and that's when the encephalocele came  
11 through.

12 Q. Well, assume that before he came to see you  
13 he was driving a truck, 18 wheeler, 40, 60, 70 hours  
14 a week, having no problem with inner ear --

15 A. Middle ear.

16 Q. Tinnitus, buzzing?

17 A. Well, that's inner ear. Brain actually, go  
18 ahead.

19 Q. Okay. Excuse me --

20 A. No, that's okay. I'm trying -- balancing  
21 being technical with being understandable.

22 Q. And assume that on January 20 he gets hit  
23 by a forklift.

24 MR. PICKETT: June 20.

25 Q. June 20, 2013, I'm sorry. Hits his head on



1 the hinge on the door frame causing that laceration  
2 you see on the left side of his head, and after that  
3 continually for the next few days gets worse, even  
4 came to Geisinger on June 22 -- June 28 to the ER,  
5 or 24, shortly after, within a week after the  
6 trauma, he had the, pronounce that word with an O,  
7 opacification?

8 A. Opacification, yes.

9 Q. And then Dr. Eckel, do you know Dr. Tim  
10 Eckel, he's a family physician?

11 A. I know the name, but I don't get out much.

12 Q. He refers him to you. And I know you can't  
13 say with a scientific certainty, but with a  
14 reasonable degree of medical certainty is it more  
15 likely than not, based on those facts, that this  
16 was --

17 A. Right. But I actually did say that this --  
18 since the symptoms occurred after it, I think it's  
19 very reasonable to assume the CSF leak occurred  
20 then. Whether or not there was a pre-existing  
21 encephalocele doesn't change things. Because I  
22 can't say whether the encephalocele was there or  
23 not, or whether it was a true fracture. Either way,  
24 there was no symptoms or anything before, and  
25 afterward he had these symptoms which were

1 associated with a CSF leak.

2 Q. And I understand what you're saying now.  
3 You can't say whether or not the encephalocele and  
4 fracture predated the trauma or not. You could just  
5 -- in your opinion the spinal --

6 A. A fracture implies trauma. So I would say  
7 the encephalocele could occur through a natural  
8 defect, not an old trauma.

9 Q. Okay.

10 A. But he could have either been a setup for a  
11 CSF leak and then had a trauma which caused the CSF  
12 leak, or he had a fracture with an encephalocele and  
13 a CSF leak. But either way after the trauma, there  
14 was a CSF leak.

15 Q. And it's the trauma that -- if it  
16 pre-existed or was caused by the trauma, the spinal  
17 fluid leak occurred after the trauma in your  
18 opinion?

19 A. Uh-huh.

20 MR. PICKETT: Object to leading.

21 Q. I'm going to try to clear that up. Do you  
22 have an opinion whether or not this spinal fluid  
23 leak occurred due to a trauma?

24 A. Well, again, since he didn't have the  
25 symptoms before, and he had them after, and I'm

1 saying the symptoms are associated with fluid behind  
2 the eardrum, that turned out to be CSF, then I would  
3 say that the CSF leak was caused by the trauma  
4 regardless of whether he was a setup before for  
5 underlying encephalocele through a defect, or  
6 whether there was an actual fracture through the  
7 skull base.

8 Q. Got you. Okay. Thank you. Just a couple  
9 more questions. Mr. Newcomb as a patient, did he  
10 follow your recommendations and your instructions?

11 A. I believe so. It's hard to -- with all due  
12 respect after over three years I don't recall -- put  
13 it this way, I don't recall him not following my  
14 recommendations.

15 Q. Some patients are what we call  
16 noncompliant, is that right?

17 A. I try not to use that term because it's not  
18 nice and it's not helpful. But anything I  
19 recommended he tended to do. But it's nothing that  
20 sticks out in my memory like he should have done  
21 this, thus this happened, and ugh, to put it  
22 bluntly.

23 MR. HELMS: Okay. Doctor, that's all  
24 the questions I have right now. I appreciate it.  
25 Mr. Pickett is going to have some questions.

1 THE WITNESS: Sure.

2 \* \* \* \*

3 CROSS EXAMINATION

4 \* \* \* \*

5 BY MR. PICKETT:

6 Q. Dr. Azeredo, the area that you treated and  
7 the area where you could see a healed laceration on  
8 Mr. Newcomb, those were both on the left side of his  
9 head?

10 A. Correct.

11 Q. Can you reach the exhibit, I wanted to ask  
12 you some questions about it.

13 A. Do you want this?

14 Q. No, I'm just going to direct you. These  
15 are pictures, drawings that were done to help us  
16 orient ourselves and see where things are in  
17 relation to each other. As far as size, the  
18 drawings are not -- they're not accurate or to  
19 scale, are they?

20 A. No, of course not.

21 Q. And one thing in particular, the diagram in  
22 the lower left corner, the side view, that's a side  
23 view of the right side of a head, of a human head,  
24 correct?

25 A. Sure. But it doesn't change the

1 orientation of an incision.

2 Q. Okay. But just to be clear, even though  
3 the drawing is of the right side, the procedure you  
4 did is actually on the left side?

5 A. Yeah, correct.

6 Q. The drawing just above that, is that a view  
7 from the front or from the back?

8 A. A standard medical view says it's from the  
9 front.

10 Q. Which would indicate that --

11 A. That this is the left side that we've been  
12 talking about, yes.

13 Q. And then the rest of these pictures appear  
14 to be of the left side?

15 A. To jive with this.

16 Q. It's just the one on the bottom left that's  
17 right, and that one's just --

18 A. Correct.

19 Q. It's just the other side?

20 A. You're correct. This is the right side,  
21 which is the incorrect side.

22 Q. It's the wrong side for this procedure in  
23 this particular case?

24 A. Exactly.

25 Q. The place where the defect occurs, and I'm

1 referring to --

2 A. Skull based defect?

3 Q. Yes, sir. The dehiscence that's right  
4 where the encephalocele is, the drawing shows that  
5 area of bone that's fairly broad and wide, is that  
6 accurate, or is it actually thinner than that?

7 A. Are you talking about the depth of the  
8 bone?

9 Q. Yes.

10 A. Or the area of the defect?

11 Q. The depth of the bone.

12 A. It depends on the patient. In  
13 Mr. Newcomb's case in particular it's thinner than  
14 that.

15 Q. In some --

16 A. It's typically very thin. But for  
17 illustrative purposes certainly things that we  
18 review with patients often show it this thick. It's  
19 just a question of for clarity for a patient versus  
20 being absolutely accurate.

21 Q. But in Mr. Newcomb's case it was actually  
22 very thin?

23 A. It is -- was -- it is.

24 Q. And that's not uncommon, you see that in a  
25 lot of patients?

1 A. It's not uncommon.

2 Q. Could I go so far to say that it's paper  
3 thin and be accurate in some people?

4 A. Paper thin is a little bit too thin in no  
5 small part because of just the material of paper  
6 versus bone. It's still solid.

7 Q. Right.

8 A. But it can be easily a millimeter thick or  
9 less.

10 Q. Okay. And --

11 A. Put it this way, there's some patients  
12 where focally you can't see it on a CT scan in  
13 spots.

14 Q. You don't see any depth of bone at all in  
15 the CT scan?

16 A. Because of the limits of a resolution of a  
17 CT scan.

18 Q. The thinness of the bone in that area, is  
19 that what lends itself to these spontaneous defects  
20 that you talked about earlier?

21 A. Controversial, but that's the presumption,  
22 or whatever force is -- people with spontaneous  
23 leaks probably wouldn't affect someone if they had  
24 thicker bone.

25 Q. And these spontaneous leaks are something

1       that occur in a significant portion of the  
2       population?

3       A.           No. They're rare. They're not for me  
4       because of the patients I see. But I doubt you know  
5       anyone that's had a spontaneous leak.

6       Q.           Are you familiar with studies that have  
7       shown the dehiscence in that area in as much as or  
8       as little as -- as much as two percent of the  
9       population?

10      A.           With what?

11      Q.           Two percent of the population?

12      A.           What's in two percent of the population?

13      Q.           Dehiscence?

14      A.           Dehiscence?

15      Q.           Dehiscence, excuse me. Dehiscence.

16      A.           Of course I am. That doesn't mean you have  
17      a leak.

18      Q.           But I'm talking about there being an  
19      opening in that -- a dehiscence would tell us  
20      there's an opening in the area of bone that we're  
21      talking about that?

22      A.           Of course I'm aware of studies like that.  
23      But that's what I'm saying, there are many people  
24      whose tegmen's are so thin, and some people who  
25      actually -- who postmortem are found to have



1 dehiscence through the skull base, yes.

2 Q. So can we say there is a significant  
3 portion of the population that has a dehiscence in  
4 that area?

5 A. Sure.

6 Q. Which would be an opening of the bone in  
7 that area?

8 A. Right. To clarify it, but not a CSF leak,  
9 which is what you were asking me.

10 Q. Okay. So that's two different things.  
11 There could be an opening in the bone, but the CSF  
12 is not actually leaking?

13 A. You have to have dura compromised in order  
14 to have a CSF leak.

15 Q. So we've got three layers between the brain  
16 and the external world, is that fair to say, the  
17 skull --

18 A. Where are you talking about? In the skull  
19 base, are you talking about lateral skull base, or  
20 where?

21 Q. That skull base, you've got the skull, the  
22 tegmen -- which that's the bone there, the skull  
23 bone is call the tegmen in that area, is that right?

24 A. Uh-huh.

25 Q. And then above -- between that, or moving

1 in from that, you have got the dura?

2 A. Okay, yeah, of course.

3 Q. And then inside of that you have got the  
4 inner lining of the brain, the word escaped me at  
5 the moment, the lining of the brain we talked about  
6 a minute ago?

7 A. The meningis.

8 Q. Meningis, thank you. So you have all three  
9 of those layers. And unless there's a rupture of  
10 the dura and the skull, you're not going to have a  
11 CSF leak, is that correct?

12 A. Uh-huh.

13 Q. So you could have an opening in the tegmen  
14 which is the skull bone, but not in the dura and not  
15 have a CSF leak?

16 A. I'm sorry, say that again, I drifted.

17 Q. You could have an opening -- you could have  
18 an opening in the tegmen, in the skull bone?

19 A. Correct.

20 Q. But not in the dura?

21 A. Right. And thus you would not have a CSF  
22 leak.

23 Q. And that condition has been seen to occur  
24 in a portion of the population in autopsy  
25 photographs and --

1 A. The bottom line is two percent of the  
2 population may have some small defect in the skull  
3 base, but it's far less than two percent of the  
4 population that gets a CSF leak.

5 Q. Okay. The people that have that dehiscence  
6 or that opening --

7 A. Do you still need this?

8 Q. Yes, just for another minute.

9 A. Okay.

10 Q. Those people are more prone to a CSF leak?

11 A. Unclear.

12 Q. Okay. The question was unclear or the  
13 answer?

14 A. No, your question is clear. But it's not  
15 -- there are reasons why you could have thin -- it's  
16 an area of ongoing research, but that's for a  
17 spontaneous CSF leaks which is a different issue.

18 Q. Different issue from what?

19 A. From a traumatic CSF leak.

20 Q. And in this case your opinion is that this  
21 CSF leak, even if there was a pre-existing opening  
22 in the skull, the CSF leak was caused by the trauma?

23 A. He had no symptoms before associated with  
24 fluid behind the eardrum, and that fluid behind the  
25 eardrum was bound to be CSF. And once it was

1 repaired those symptoms went away.

2 Q. Okay. The day that you first saw him and  
3 made the little incision in his eardrum and checked  
4 the fluid and all, that date was July 22, correct,  
5 of 2013?

6 A. Sure, again, you've had more recent access  
7 to his notes than I have, so that sounds right.

8 Q. By the time you saw him the sutures on his  
9 wound had been --

10 A. Removed.

11 Q. And the wound was healed to a degree?

12 A. Uh-huh.

13 Q. Would it be consistent with it having been  
14 about a month, about a month or so after the  
15 laceration had occurred?

16 A. Sure.

17 Q. So the laceration occurs on June 20 and you  
18 first saw him on July 22, that would be consistent  
19 with your -- what you observed?

20 A. Uh-huh.

21 Q. The diagram that's labeled B, where it  
22 shows, bone removed?

23 A. Uh-huh.

24 Q. And it shows that's the removal of an area  
25 for the window that you talked about earlier?

1 A. Right.

2 Q. And that looks like a pretty large disk of  
3 bone being removed, but it's actually a very small  
4 window that you use, correct?

5 A. Right. As you said, these aren't to scale.

6 Q. That shows a much bigger circle of bone  
7 being removed than actually was removed?

8 A. Correct.

9 Q. I'm done with the diagram now if you want  
10 to put it down. Thank you for holding it for me.

11 A. Sure.

12 Q. In this case you describe there as -- I  
13 believe you said meningoencephalocele -- and there's  
14 a standard encephalocele?

15 A. Okay.

16 Q. Is that --

17 A. Close enough.

18 Q. The meningo is where you've actually got  
19 brain matter that is recognized as part of the  
20 encephalocele?

21 A. Meningoencephalocele.

22 Q. Meningo.

23 A. But, again, I was just clarifying that  
24 encephalocele just means herniation of contents from  
25 the brain case. It doesn't imply there's

1 necessarily neurons, brain material in there.

2 Q. And in this case what we had was not a  
3 meningoencephalocele but an encephalocele?

4 A. Don't know, didn't send a tissue sample  
5 because it wouldn't change what we needed to do.

6 Q. Whether or not this -- and the  
7 encephalocele is the herniation or the bulge of  
8 something inside the skull coming out?

9 A. Uh-huh.

10 Q. And what bulged out may or may not have  
11 included any actual neuron, brain matter?

12 A. Correct.

13 Q. We just don't know?

14 A. Either way what herniated through would be  
15 nonviable, so it's not -- and that's more -- this is  
16 probably -- if you wanted to ask further questions  
17 it's probably better to ask that of the  
18 neurosurgeon, not me.

19 Q. The size of what came through was  
20 relatively small though, correct?

21 A. Uh-huh.

22 Q. Smaller than what we just saw on the  
23 diagram?

24 A. And, again, given that the diagrams are  
25 illustrative it's, you know -- but I would say that

1 in true size it wouldn't be massively different. If  
2 it was relative to this, it's disproportionate. But  
3 it's enough so that the defect that it went through  
4 was big enough to put a piece of cartilage from here  
5 to cover it, and have it covered effectively. So  
6 you're talking a defect under a centimeter, but  
7 that's still a decent size defect for what's not a  
8 very big area.

9 Q. In terms of -- for a south Georgia jury, a  
10 centimeter is how much inches?

11 A. It's the other way around, 2.54 if I recall  
12 correctly from grade school, centimeters to an inch.

13 Q. So two and a half centimeters make up an  
14 inch. So a centimeter is roughly a fifth of an  
15 inch, something like that?

16 A. The size of a navy bean. (Indicating.)

17 Q. As far as this, whether this encephalocele  
18 included any brain matter, we don't know that?

19 A. No.

20 Q. We talked about meningitis. In this case  
21 there was no meningitis?

22 A. No. But keep in mind, the surgery is to  
23 prevent meningitis.

24 Q. I understand. But it was successful and  
25 there was no meningitis, and he had not had

1 meningitis at any point?

2 A. Since we're very exacting in how we view  
3 it, he has not had meningitis.

4 Q. You mentioned that if there are multiple  
5 leaks you'll plug them with a bone wax?

6 A. No, no, no. I mentioned if there are  
7 multiple defects we'll plug them with bone wax.

8 Q. Multiple defects, multiple openings in  
9 the --

10 A. Tegmen.

11 Q. In this case were there multiple openings  
12 in the tegmen?

13 A. There were several small ones as I recall.  
14 But, again, as you mentioned that's not atypical.  
15 But once you have a leak if you're not going to  
16 repair the dura you want to plug all the leaks.

17 Q. So we're not talking about one skull  
18 fracture opening where brain material came out and  
19 had to be cut off and healed, but we're talking  
20 about multiple openings?

21 A. That was the main one, and that was by far  
22 the biggest one. And then anything, since we don't  
23 want to go back in there, any other spot that looks  
24 like it could be another source for CSF to go  
25 through, we fill with bone wax.



1 Q. But in Mr. Newcomb's case there was a  
2 main --

3 A. Encephalocele and defect.

4 Q. Defect where there was an encephalocele?

5 A. Uh-huh.

6 Q. And then there were other smaller defects  
7 where there was no encephalocele, there was no brain  
8 material coming through?

9 A. Correct.

10 Q. But there was still, because the tegmen was  
11 so thin, still some other openings in the skull?

12 A. Uh-huh.

13 Q. And you plug those with bone wax.

14 A. (Witness nodded.)

15 Q. The window of bone you said was so small  
16 that you could have larger windows and not need to  
17 put anything --

18 A. You're talking about the lateral skull base  
19 now? You're talking about here, this window?

20 Q. Yes, the window I believe you said the  
21 titanium plate was used?

22 A. Uh-huh.

23 Q. We're talking about titanium plate, how  
24 large are we talking, centimeters?

25 A. Well, the titanium is -- the titanium isn't

1 anything to do with the size of the plate, it has to  
2 do with it being well tolerated and MRI compatible.

3 Q. What I'm asking you is how large was the  
4 plate that you --

5 A. It was a burr hole cover, so it was about  
6 that big. (Indicating.)

7 Q. Okay.

8 A. Think of it about the size of a quarter.

9 Q. Okay. And how big is the hole that it's  
10 covering?

11 A. Slightly larger. So you don't want to  
12 cover the entire hole because you have the muscle,  
13 so you don't want to pinch on the muscle tissue and  
14 myofacial flap I talked about. So you basically  
15 have the plate there, screwed here and here so it's  
16 not pinching on that flap and screwed onto the skull  
17 superior to the defect. But you're talking about  
18 that would cover most of the hole.

19 Q. Was the skull underneath there healed?

20 A. I'm sorry, underneath what?

21 Q. Under the plate?

22 A. It's not a question of healing, it's just  
23 screwed in there. I don't understand.

24 Q. Does the skull bone mend itself behind  
25 that?

1 A. You mean the defect.

2 Q. No, the window that was taken out, that  
3 opening?

4 A. No, it's just dead scar afterward.

5 Q. Okay. Because you take a disk of bone is  
6 removed?

7 A. Uh-huh.

8 Q. About half inch or so I guess?

9 A. In diameter.

10 Q. Yes.

11 A. I'm getting confused. Are you talking  
12 about the lateral window here?

13 Q. Yes.

14 A. I mentioned earlier, about a centimeter and  
15 a half, if you want half an inch by about an inch.  
16 It's a triangular shaped piece, probably about that  
17 big. (Indicating.)

18 Q. Okay.

19 A. And you put a burr hole cover, which covers  
20 most of it. But any time you do a craniotomy there  
21 is going to be some small defect and it scars in and  
22 there aren't issues. So I'm not sure what the  
23 question really is.

24 Q. When you say it scars in, that means the  
25 bone fills in around it?

1 A. Sometimes.

2 Q. Okay. And you've had situations where you  
3 could see a window of that size that you would  
4 require no burr cover at all?

5 A. Yes, and that's what I was talking about  
6 with a neurosurgeon is like, yeah, I wouldn't even  
7 bother putting that piece of bone back on. And I  
8 was like, well, at least I want to put a burr cover  
9 on. But again, so since this is the unique  
10 situation where I'm involved in making a craniotomy,  
11 if you want to talk about a broad series of  
12 questions about craniotomies, you're better off  
13 talking to the neurosurgeon. We always make small  
14 craniotomies, because we don't need a big  
15 craniotomy, because what we're trying to do is a  
16 very small area.

17 Q. Like you said, you're used to working in  
18 small spaces?

19 A. (Witness nodded.)

20 Q. And all of the work that you did, all of  
21 the procedures you did for Mr. Newcomb was on the  
22 left side of his head?

23 A. Uh-huh.

24 MR. PICKETT: That's all I have.

25 \* \* \* \*

REDIRECT EXAMINATION

\* \* \* \*

BY MR. HELMS:

Q. When you say this burr hole was attached with screws?

A. Uh-huh.

Q. Just like you would screw a plate over a piece of wood?

A. I've never screwed a plate over a piece of wood. I'm more confused by that.

Q. Okay.

A. But it's like any sort of plating system like facial fractures only thinner in that area.

Q. I'm just searching for an analogy?

A. The simplest way to put it I guess would be, yeah, if you screwed anything else together. Simple screws and you just have different lengths of screws based on how thick the skull is so you don't obviously, you know, have a longer screw than the depth of the skull and you just screw a plate in.

Q. Little tiny screws?

A. Yeah, like three millimeters, you know, typically, four.

Q. Screwed through the plate and into the skull?

1 A. Into the bone of the skull.

2 Q. Thank you.

3 A. It's a standard series of plating systems  
4 for different types of fractures. And my area it's  
5 usually facial fractures, you know, so it's just  
6 part -- I guess I never thought of it as odd, but I  
7 guess it is.

8 MR. HELMS: That's all the questions I  
9 have.

10 MR. PICKETT: Thank you, Doctor.

11 THE VIDEOGRAPHER: The time is 9:24.

12 That concludes this video deposition.

13 (The deposition concluded at 9:24 a.m.)  
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\_\_\_\_\_, 2017

I hereby certify that  
the evidence and proceedings are contained fully and  
accurately in the notes taken by me of the testimony  
of the within witness who was duly sworn by me, and  
that this is a correct transcript of the same.

\_\_\_\_\_  
Justine Starrick  
Registered Professional Reporter  
Notary Public

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